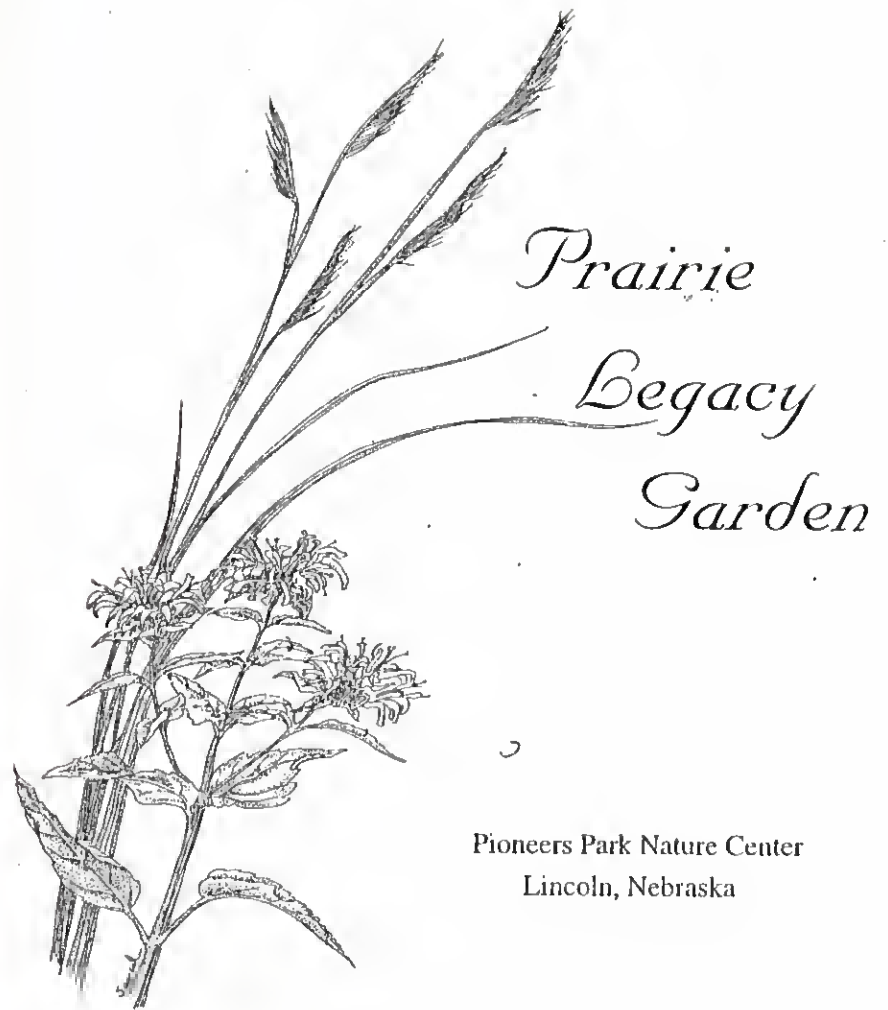


This booklet may be borrowed with a \$1.00 deposit. Please return it to a staff member at either building when you are finished, and your money will be refunded. If you wish to keep it, a \$1.00 donation is requested. Thank you.

For more information or to schedule an interpretive program, please call
402-441-7895.



The mission of the Pioneers Park Nature Center is to interpret the natural history of Nebraska and the Central Great Plains; to promote the enjoyment, appreciation, and awareness of our natural environment; to practice and foster a conservation ethic; and to provide a sanctuary for wildlife and a peaceful retreat for people.



Prairie Legacy Garden

Pioneers Park Nature Center
Lincoln, Nebraska

Sources Used:

- Farrar, Jon. *Wildflowers of Nebraska and the Great Plains*. NEBRASKAland Magazine, Nebraska Game and Parks Commission, Lincoln, Nebraska. 1990.
- Gilmore, Melvin R. *Uses of Plants by the Indians of the Missouri River Region*. University of Nebraska Press, Lincoln and London. 1991.
- Great Plains Flora Association. *Flora of the Great Plains*. University Press of Kansas, Lawrence. 1986, 1991.
- Runkel, Sylvan T. and Dean M. Roosa. *Wild Flowers of the Tallgrass Prairie*. Iowa State University Press, Ames. 1989.
- Sanders, Jack. *Hedgemaids and Fairy Candles: The Lives and Lore of North American Wildflowers*. Ragged Mountain Press, Camden, Maine. 1995.
- Shirley, Shirley. *Restoring the Tallgrass Prairie*. University of Iowa Press, Iowa City. 1994.
- Young, Kay. *Wild Seasons: Gathering and Cooking Wild Plants of the Great Plains*. University of Nebraska Press, Lincoln and London. 1993.
- Young, Kay. Unpublished field research notes.

The Prairie Legacy Garden

The Prairie Legacy Garden located in Pioneers Park Nature Center was created in the hope that this small piece of earth might be in itself a seed. Planted in the hearts of those passing through, may it foster appreciation for the magnificent beauty and diversity of the prairie, and for the greater earth to which we are connected and on which we depend.

This brochure contains information on twenty nine prairie plants, arranged in order of flowering, and selected because there is documentation of their use by Plains Indians and/or early settlers. Many other beautiful and interesting wildflowers, grasses, and shrubs occur in the tallgrass prairie, and in this garden. Not all sources of information about the historical uses of plants are reliable. Therefore, sources for the information in this brochure were carefully selected and are listed in the bibliography.

The Pioneers Park Nature Center encourages individual visitors, garden clubs, and schools to plant their own prairie gardens and invites them to create their own brochures by photocopying the pages of this booklet for which they have plants. Groups may wish to create a special cover for a brochure they put together for their own garden. We ask that the following credit appear in each booklet:

Reprinted from the Prairie Legacy Garden Brochure
Pioneers Park Nature Center, 3201 South Coddington
Lincoln, Nebraska 68522

It is important for anyone wishing to use wild plants to be aware that some plants, or parts of plants, are poisonous. To be safe, make certain that you have the right plant and the right plant part. Use plants that have not been sprayed with herbicides or pesticides. Never put anything into your mouth, even just to taste, unless you know what it is and that it is safe to eat.

It is also important to realize that very few tallgrass prairies remain, and that they are a precious resource for us all. Plants or plant parts should never be gathered from a protected prairie, and should be gathered with restraint and respect from other sources.

Text by Becky Seth and Kay Young. Drawings by Mary Sawicki. Layout by Becky Seth. Printing funded by the Lincoln Garden Club.

Spring, 1998

Buffalo pea (groundplum, buffalobean, prairie-apple)

Astragalus crassicaerpius

Bean family: Fabaceae (Leguminosae)



mature pods

Flowering Period

Late March into May.

Description

Perennial. 4-24 inch long stems recline on ground with rising tip. Leaves odd-pinnately compound. Clusters of 5-25 flowers near end of stems. Petals can be purple, bluish, pink, or sometimes white. Pods are plump, green, and grape-shaped at first; mature pods are round and often reddish where exposed to the sun.

Habitat

Well drained soils (upland prairie). Full sun. Disappears with heavy grazing.

Propagation

By seed. Gather in July. Needs scarification and 10 days of stratification.

Plains Indian/Settler Uses

Both Plains Indians and early settlers ate the small, rounded pods raw, cooked, or pickled. The Omaha and Ponca soaked the pods with corn seed, discarding the pods before planting the seed. The purpose behind this practice has been lost.

Additional Information

Buffalo peas resemble certain other prairie plants that are poisonous. Accurate identification is important. Buffalo peas were a favorite food of bison. Prairie dogs and other rodents have been found to gather and store the pods.

Glossary

Awn: a long bristle (often found on grass seeds).

Compound leaf: a leaf made of several leaflets.

odd-pinnately compound: leaflets arranged in two rows along a stem, with a single leaflet at the tip.

palmately compound: leaflets arise from the same point.

Division: separating the root system of a parent plant into several pieces.

Floret: a small, individual flower in a cluster of other florets, which together form a flower head (as in members of the sunflower family).

Leaf axil: the place on a stem where leaves emerge.

Linear: a leaf shape that is long and narrow

Ovate: a leaf shape that is somewhat egg-shaped but broader at the base and coming to a point at the tip.

Perennial: a plant that lives more than two years.

Rhizome: an underground stem that usually lives for many seasons.

Scarification: a seed treatment in which the seed coat is nicked or sanded - this aids germination when seed coats are hard.

Spikelet: a cluster of one or more small flowers and their parts, often found in grasses.

Stratification: a seed treatment in which the seed is chilled and kept moist - this approximates overwintering outside.

Porcupinegrass

Stipa spartea

Grass family: Poaceae (Gramineae)



Flowering Period

June and July.

Description

Cool season perennial. Height: 3-4 feet. Grows in a small bunch. Leaves are flat, smooth on the upper side and ribbed on the lower. Flower heads made up of a few branches with a few spikelets each. The distinctive awns are 4 to 8 inches long and the seed has a sharp point.

Habitat

Sandy, well-drained soil. Full sun.

Propagation

Grow by seed. Gather in late June. Starts to grow in fall.

Plains Indian/Settler Uses

The Plains Indians gathered the stiff awns into a bundle, burned off the sharp seeds, and used this bundle as a hairbrush.

Additional Information

The awns coil in response to humidity, an action that screws the seeds into the soil. The sharp seeds can be dangerous to people and animals. Settlers called them 'devil's darning needle.'

Yarrow

Achillea millefolium subsp. *lanulosa*

Sunflower family: Asteraceae (Compositae)



Flowering Period

Principally late May and June, into September

Description

Perennial, spreading by rhizomes. Height: 1-2 feet. Deeply divided, fern-like leaves. Flat-topped clusters of small white to light pink flowers. Strongly scented.

Habitat

Dry soils. Full sun.

Propagation

By root division in spring or from seed. Gather seed in late summer or fall.

Plains Indian/Settler Uses

The Winnebago used an infusion of the leaves medicinally. Settlers steeped the young leaves to make a tea for treating canker sores and flu symptoms.

Additional Information

The genus name, *Achillea*, comes from the Greek hero, Achilles, who is said to have treated wounds with yarrow. Related sub-species were found in Europe and used to treat a wide variety of medical problems. Today it is difficult to tell if an individual plant is native, even if it bears white flowers.

Clammy Groundcherry (husk or strawberry-tomato)

Physalis heterophylla

Nightshade family: Solanaceae



Flowering Period

Late May into September.

Description

Perennial. Height: 1-2 feet. Leaves ovate with pointed tip, sticky or clammy to the touch, hairiness varies. Bell-shaped, nodding flowers are greenish-yellow with a brown center. Fruit is a berry enclosed in a papery husk and is yellow to reddish-brown when ripe. Fruits ripen in fall.

Habitat

Rich, well-drained, disturbed soils. Full sun.

Propagation

By seed. Gather in late fall.

Plains Indian/Settler Uses

The Plains Indians made these fruits into a sauce for food. When plentiful they were dried for later use. Groundcherries were an important source of fruit for settlers who also used them for sauce. Settlers even planted them in their gardens.

Additional Information

The nightshade family includes popular foods such as tomatoes and peppers, but also very toxic members. Groundcherry plants and the green, unripe fruits are toxic. Only ripe (yellow to reddish-brown) fruits within husks are safe to eat. Be aware that the small yellow fruits without husks that grow on similar plants are not groundcherries and are poisonous. Several species of groundcherries occur on the plains, but even today, the clammy groundcherry is considered the best tasting.

Purple Prairie-clover (thimbleweed, red tassel-flower)

Dalea purpurea

Bean family: Fabaceae (Leguminosae)



Flowering Period

June and July.

Description

Perennial with deep taproot. Height: 1-3 feet. Stems slender, erect, and frequently branched. Leaves odd-pinnately compound with 3 to 7 linear leaflets. Tiny red-violet flowers in a spike, maturing from base to tip.

Habitat

Dry to moderately moist soils. Drought tolerant. Full sun.

Propagation

By seed. Gather in late September and October. Germinates easily but needs stratification and scarification. Transplanting is difficult.

Plains Indian/Settler Uses

A tea-like drink was brewed from the leaves by the Oglala. The Ponca chewed the roots because of the pleasant taste. The Pawnee gathered the tough stems into bundles to use as a broom and also used an infusion of the root medicinally.

Additional Information

A related species, *D. candida*, has white flowers, and compound leaves with 7 to 11 leaflets, somewhat broader than *D. purpurea*. Both species are a beautiful addition to the garden, attract beneficial insects, and make lovely cut flowers.

White Sagewort (Louisiana wormwood, cudweed sagewort, white-sage)

Artemisia ludoviciana

Sunflower family: Asteraceae (Compositae)



Flowering Period

August to October.

Description

Perennial with a dense mat of slender, creeping rhizomes. Height: 1-3 feet. Leaves are variable from long, narrow ovals to deeply divided broad ovals. Leaves are covered with a dense mat of whitish hairs. Heads of inconspicuous greenish-white flowers borne at the ends of upper branches.

Habitat

Rocky, gravelly, or sandy loam. Full to partial sun.

Propagation

By division in early spring or by seed. Gather seed in October.

Plains Indian/Settler Uses

Plains Indians used this and other species of *Artemisia* for both medicinal and religious purposes. It was used for ceremonial bathing. Bunches of this aromatic plant were burned as incense. And it was sometimes used as a towel. Among settlers, it was occasionally used as a hair rinse to prevent baldness.

Additional Information

This species is highly variable, and somewhat aggressive. It is not a true sage (which belong to the mint family) and is not edible.

Buffalo Currant (black currant)

Ribes odoratum

Currant family: Grossulariaceae



Flowering Period

April to May.

Description

Slender, branched shrub (no thorns). Height: up to 5 feet. Leaves as broad as long, deeply lobed, usually coarsely toothed. Yellow to occasionally red flowers occur in hanging clusters. Fruit a round berry, yellow, turning black when fully ripe in early summer.

Habitat

Dry hillsides, edges of thickets. Full sun.

Propagation

By root division or transplanting young shrubs in early spring.

Plains Indian/Settler Uses

Fruits were eaten fresh, cooked, or dried by both Plains Indians and settlers. Settlers prized the fruit for jelly because it contains pectin, the compound that causes jelly to become firm.

Additional Information

A related species, *R. americanum*, occurs in more moist habitats and has white to pale yellow flowers. The fruits ripen in late summer and are less flavorful than the buffalo currant.

Sandcherry

Prunus pumila var. *besseyi*

Rose family: Rosaceae



Flowering Period

April to May.

Description

Branched shrub. Height: up to 2 feet. Branches often bend to the ground. Leaves dark green above and paler below, tending to cluster at branch tips. Flowers small and white, five petals. Fruits about the size and shape of Bing cherries, purple-black to reddish, ripening in early summer.

Habitat

Sandy or rocky prairies. Full sun.

Propagation

By seed. Gather when fruits are ripe (usually July). Needs stratification. Can be transplanted when young in early spring or late autumn.

Plains Indian/Settler Uses

An important source of food for the Plains Indians, sandcherries were cooked and eaten. More commonly, the fresh fruits were pounded into a mush, seeds and all, dried in patties, and stored for winter use. Proper drying broke down the toxic substance found in the seeds. Settlers also ate this fruit, using it for sauce or pies. Both Plains Indians and settlers gathered sandcherries in festive group outings.

Additional Information

Fruit yields vary, with a heavy crop about every three years.

Jerusalem-artichoke (Canada-potato, earth-apple, girasole)

Helianthus tuberosus

Sunflower family: Asteraceae (Compositae)



Flowering Period

August and September.

Description

Perennial growing from rhizomes bearing tubers. Height: 3-9 feet. Stems hairy, rough, branched above. Lower leaves mostly opposite, upper leaves mostly alternate. Leaves ovate, rough, and usually coarsely toothed. Flowers borne in heads at branch ends. Both ray and disk florets are yellow.

Habitat

Moist, rich soils. Full sun to partial shade.

Propagation

Grows easily from a tuber. Dig in late autumn.

Plains Indian/Settler Uses

Plains Indians used the tubers as food, raw, boiled, or roasted. Apparently Nebraska tribes did not cultivate this plant, but it was widely cultivated by native people in the eastern United States. Settlers on the East Coast introduced it into Europe as early as 1582.

Additional Information

This plant is not an artichoke, nor is it from Jerusalem. The name Jerusalem apparently arose because of a mispronunciation of the word 'girasole' meaning 'turning to the sun,' since the flower heads follow the path of the sun. The tubers of the native plant are smaller than the domesticated variety marketed as 'sunchokes.' Tubers of both the wild and domesticated forms contain inulin, which for some people, causes severe abdominal cramps.

Compass-plant (pilotweed, gumweed, rosinweed)

Silphium laciniatum

Sunflower family: Asteraceae (Compositae)



Flowering Period

July and August.

Description

Perennial growing from a long woody taproot. Height: 4-7 feet. Stem stout, not branched, and with stiff hairs. Leaves leathery and deeply lobed, rough to the touch. Flower heads in clusters, with yellow ray florets and brown disk florets.

Habitat

Moist to fairly dry soils. Full sun.

Propagation

Easy from seed. Gather in early October. Needs 60 days of stratification. Slow growing.

Plains Indian/Settler Uses

The Ponca and Pawnee would not camp near this plant since they believed it attracted lightning. The dried root was burned during storms to avert lightning strikes. A resinous sap oozes from the cut or broken upper stem. Plains Indian children used the sap as chewing gum. Various preparations from this plant were used medicinally for both humans and horses. (See notes for cup-plant.)

Additional Information

The common names of this plant arise from the position of the lower leaves which often lie in a north-to-south direction.

Wild Strawberry

Fragaria virginiana

Rosc family: Rosaceae



Flowering Period

Late April to early June.

Description

Perennial. Height: 4-8 inches. Compound leaves of three ovate, toothed leaflets. Flowers with five white petals and many yellow stamens. Fruits turn red when ripe and are small, but flavorful. Spreads quickly by stolons (horizontal stems that form roots at the nodes).

Habitat

Moist to fairly dry, rich soils. Full sun to partial shade.

Propagation

Wild strawberries are easily transplanted. Plants should be gathered from several locations to insure fruit production.

Plains Indian/Settler Uses

Both Plains Indian and settlers relished this flavorful fruit. In fact, the Dakota called the month of June "the moon when strawberries are ripe." The dried leaves were used to make tea.

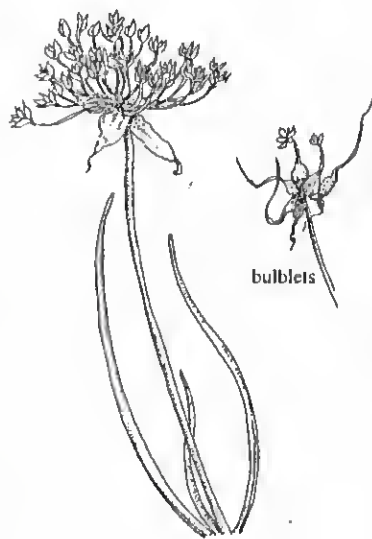
Additional Information

The cultivated garden strawberry has been bred from crossing this species with one from South America. *F. vesca*, a species that closely resembles *F. virginiana*, can be found in woodlands in Nebraska. Both species provide food for wildlife.

Wild Onion (meadow or wild garlic, wild shallot)

Allium canadense

Lily family: Liliaceae



Flowering Period:

Late April into July.

Description:

Perennial growing from a bulb. Height: leaves, 1 foot; flower stalks up to 2 feet. Two or more linear leaves. A cluster of small white to pink flowers at top of stalk. May produce bulblets or a capsule of seeds.

Habitat:

Moderately dry to moist soils. Full sun.

Propagation:

Easiest by planting bulbs, but can also be started from seed.

Plains Indian/Settler Uses:

Several species of native onions occur in the Great Plains. All were used as food by both the Plains Indians and settlers. Wild onions were eaten raw and cooked with meat and vegetables as a seasoning.

Additional Information:

Recently the American Medical Association has warned that eating the bulblets from wild onions may not be safe, although the below-ground bulb is. The pink wild onion, *A. stellatum*, blooms from July to September and does not produce bulblets.

Cup-plant (squarestem, cup rosinweed)

Silphium perfoliatum

Sunflower family: Asteraceae (Compositae)



Flowering Period

July and August.

Description

Perennial. Height: to 6 feet. Stout stems are square. Triangular leaves are opposite and joined around the stem to form a cup. Flowers are solitary or in clusters with yellow ray florets and yellow-green disk florets.

Habitat

Moist to wet soils. Full to partial sun.

Propagation

Easy by seed. Gather in September. Needs 30 days stratification.

Plains Indian/Settler Uses

Like compass-plant, to which it is related, roots of cup-plant were used medicinally by the Plains Indians, particularly as a smoke treatment for head colds and rheumatism.

Additional Information

The cup formed by the leaves collects rainwater and attracts birds and insects. This plant spreads rapidly.

Prairie Cordgrass (sloughgrass, ripgut)

Spartina pectinata

Grass family: Poaceae (Gramineae)



Flowering Period

June to October, mostly August and September.

Description

Warm season perennial with deep multi-branched roots and creeping rhizomes. Height: 4-10 feet. Long leaves are strong and tough, with edges sharp enough to cut the hand. Two rows of flattened spikelets with hundreds of tiny purple blooms.

Habitat

Wet marshy areas. Full sun.

Propagation

Grow from divisions of the rhizome in spring. The seed is rarely viable.

Plains Indian/Settler Uses

This tough grass was used to thatch roofs and provided a heavy sod for constructing sod houses. The green grass was twisted, made into bundles, and then dried and used for fuel in place of wood.

Additional Information

It is said that this grass cut the sides and bellies of livestock as they walked through, and so the name, 'ripgut.' Cordgrass is excellent for stabilizing pond edges and stream banks.

Violet Woodsorrel (sheepsorrel or sourgrass)

Oxalis violacea

Woodsorrel family: Oxalidaceae



Flowering Period

May and June, sometimes flowering again in September and October.

Description

Perennial. Height: 2 to 5 inches. Stems absent, leaves and flower stalk growing directly from a small bulb. Clover-like compound leaves with 3 heart-shaped leaflets. Several flowers of 5 pink to violet petals on stalks rising above the leaves. Leaves and flowers close at night and on cloudy days.

Habitat

Dry to moderately moist soils. Prairie, roadsides, disturbed sites. Full sun.

Propagation

Can be propagated by transplanting the bulbs.

Plains Indian/Settler Uses

Plains Indians used all parts of this plant for food and medicinal purposes. They fed the ground bulbs to horses believing that it would help them run faster. Settlers mashed the whole plant to make 'prairie lemon' pie, which became a popular dessert.

Additional Information

Woodsorrels are sour tasting because they contain oxalic acid, which should be consumed only in small quantities. Although the violet woodsorrel retains its sour flavor when cooked, yellow woodsorrel, a related species, does not.

Prairie-turnip (Indian breadroot or turnip, prairie-apple or potato)

Psoralea esculenta

Bean family: Fabaceae (Leguminosae)



Flowering Period

May into July.

Description

Perennial. Height: 6-12 inches. Stems and leaves covered with long white hairs. Palmately compound leaves with 5 oblong leaflets. Flowers clustered in hairy spikes, pea-like, deep blue fading to tan. Root becomes top-shaped 2-4 inches below the ground.

Habitat

Dry to moist, well drained soils. Full sun.

Propagation

By seed. Gather in July. Seeds must be stratified and lightly scarified.

Plains Indian/Settler Uses

The roots are exceptionally nutritious and formed an important part of the Plains Indian diet. They were dug and peeled, then eaten raw, boiled, or roasted. The peeled roots were braided together by their tapering ends and hung to dry. During winter they could be pounded into flour or reconstituted by soaking, then boiling them in water. It is reported that settlers bought these roots from the Indians.

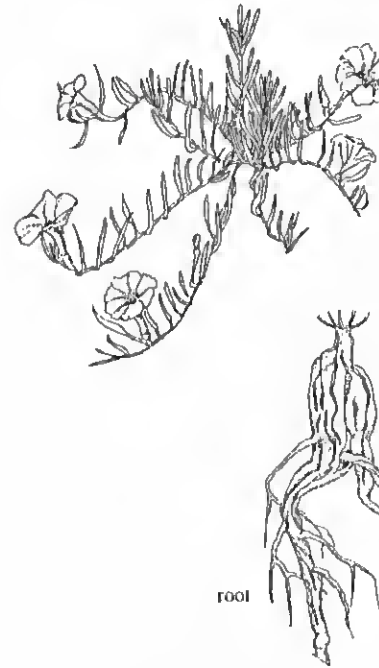
Additional Information

After the seeds are ripe, the plant breaks off at ground level and tumbles away in the wind leaving no sign, so the roots had to be dug in June or July while the plant was still green. This plant is no longer abundant and so should not be dug.

Bush Morning-glory (man-root, man-of-the-earth, bush moon-flower)

Ipomoea leptophylla

Morning-glory family: Convolvulaceae



Flowering Period

Late June into August.

Description

Perennial growing from an enlarged taproot. Height: to 3 feet. Growing to twice as wide as tall. Leaves linear. Flowers funnel-shaped, deep pink, numerous.

Habitat

Dry to moderately moist, sandy or gravelly soil. Full sun.

Propagation

Grow from seed. Gather in late summer. Scarify before planting in late spring or summer. Be patient if the plants die back the first growing season. They may come up again the following year.

Plains Indian/Settler Uses

The Pawnee burned the root as a smoke treatment for nervousness or bad dreams. When dried, the root burned slowly and with little smoke. For the Lakota, large roots provided a source of fire over long periods of time.

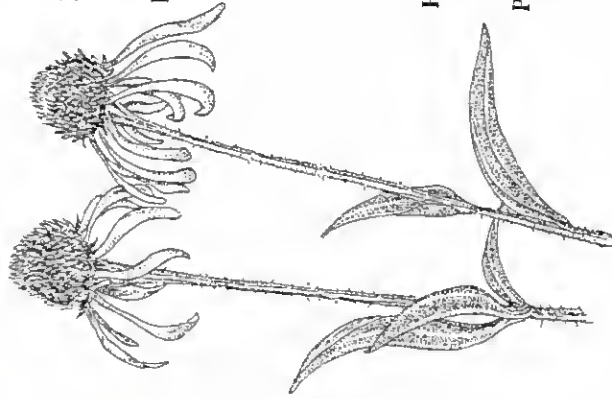
Additional Information

The root can grow to an enormous size, as much as 2 feet in diameter and to more than 3 feet long. It has the function of storing water for the plant.

Purple Coneflower (blacksamson)

Echinacea angustifolia

Sunflower family: Asteraceae (Compositae)



Flowering Period

Late June to July.

Description

Perennial growing from a long taproot. Height: 1-2 feet. Lower leaves ovate, pointed, toothed. Upper leaves progressively smaller. Stems and leaves have bristly hairs. Flower heads have a domelike, dark center and drooping, pale purple ray florets.

Habitat

Well-drained or dry soil. Full to partial sun.

Propagation

Grow from seed. Gather in late summer. Stratification necessary.

Plains Indian/Settler Uses

A prized medicinal plant, the Plains Indians used it to treat a wide variety of ailments requiring a topical anesthetic. It was especially valued for toothache and burns, and was sometimes used to treat snakebite.

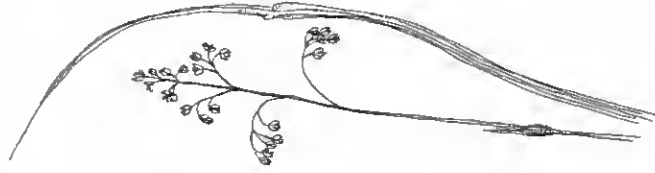
Additional Information

Purple coneflower is a desirable addition to gardens since it is easy to grow. Other species of *Echinacea* have showier blooms but are not native to Nebraska.

Sweetgrass

Hierochloa odorata

Grass family: Poaceae (Gramineae)



Flowering Period

May to July.

Description

Perennial, spreading by rhizomes. Height: Up to 2 feet. Stem hollow. Blades rolled in bud, flat when mature, nearly without hair. Small green flowers borne in a loose cluster 2-5 inches long.

Habitat

Wet meadows, low prairies, marsh edges. Full sun.

Propagation

By root division.

Plains Indian/Settler Uses

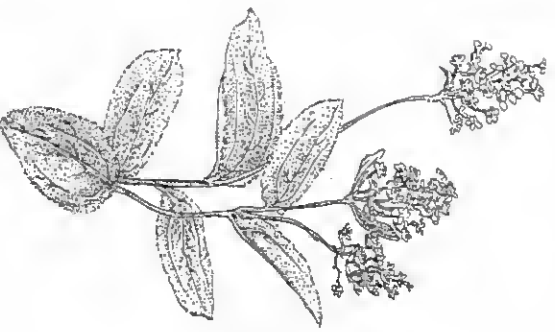
The Plains Indians made long sweetgrass braids which they used as perfume and burned as incense both in daily life and in ceremonies. These braids played an important part in Plains Indian culture and remain a vital tradition.

Additional Information

The form of sweetgrass we have in the garden is not as tall as that collected in the north for making braids.

New-Jersey-Tea (redroot, Indian-tea)

Ceanothus americanus
Buckthorn family: Rhamnaceae



Flowering Period

May into July.

Description

Erect, branched shrub. Height: 1-3 feet. Leaves dark green, oblong, toothed. Many small white flowers in a cluster, 5 petals. Roots large, woody, and gnarled.

Habitat

Well-drained, often rocky soils. High quality tallgrass prairies. Full or partial sun.

Propagation

Difficult by seed. Gather in September and October. Needs scarification and 60-90 days of stratification. Available through some prairie nurseries.

Plains Indian/Settler Uses

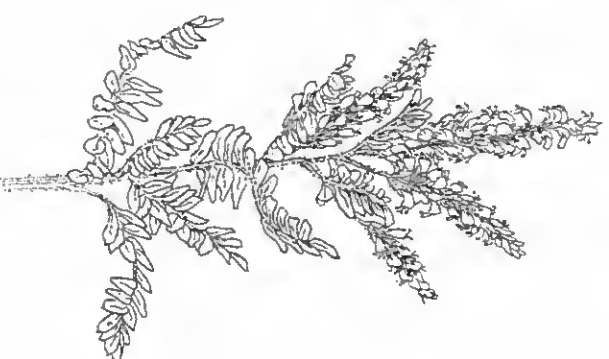
The leaves were dried and used for tea. On buffalo hunts the roots were used for fuel, often being larger than the above ground portion.

Additional Information

Tea brewed from this plant was the preferred drink during the tea boycott at the time of the American Revolution. A similar species, *C. herbaceus*, grows in many of the same areas, is also called 'redroot' and 'New-Jersey-tea,' and was used for tea. The flavors are similar.

Leadplant (prairie or devil's shoestrings, wild-tea)

Astragalus canadensis
Bean family: Fabaceae (Leguminosae)



Flowering Period

Late June through July.

Description

Perennial shrub from deep woody rootstock, often spreading by rhizomes. Height: 1-3 feet. Leaves odd-pinnately compound with 13 to 20 pairs oblong leaflets, densely covered with short, whitish hairs. Small lavender flowers with one petal are in spike-like clusters.

Habitat

Well drained soil. Full sun.

Propagation

Moderately difficult by seed. Gather in September and October. Needs 10 days stratification and scarification. Plants may be purchased from nurseries specializing in prairie stock.

Plains Indian/Settler Uses

Plains Indians dried the leaves for making tea and for smoking. Settlers also used the dried leaves for tea. They gave the plant the name devil's shoestrings because the extensive, tough root system of this plant popped when cut and made plowing difficult.

Additional Information

The Omaha-Ponca named this plant "buffalo below plant." It flowers during the bison (buffalo) rutting season when the bulls bellow. The presence of this plant shows that a prairie is in good condition.

Wild Bergamot (bee-balm, horsemint)
Monarda fistulosa
 Mint family: Lamiaceae (Labiatae)



Flowering Period
 June into August

Description
 Perennial. Height: up to 5 feet. Square stems. Leaves opposite, ovate. Spreads by rhizomes. Flowers usually pink or lavender, borne at end of branches.

Habitat
 Rich, moist soil. Full sun to partial shade.

Propagation
 Easy by seed. Gather in October. Slow to germinate. Divide plants early spring or fall.

Plains Indian/Settler Uses

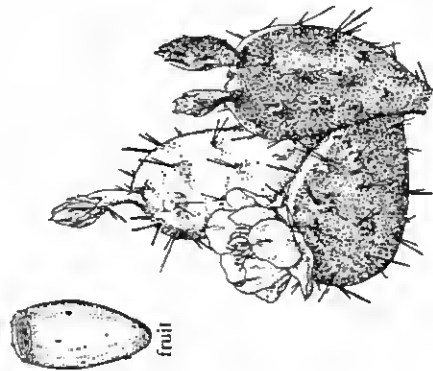
The entire plant is fragrant, but an unusual characteristic of this species is that the individual plants may have either a minty fragrance or a sweet, lemon-rose one. The Pawnee recognized four forms of this plant that differed in scent as well as strength of stem and root structure. Various Plains Indian peoples used the boiled leaves externally to treat acne and fevers, or as a tea to treat colds or abdominal pain. Fresh leaves were rubbed on the body as perfume. The dried lemon-rose leaves and flowers were used by settlers in sachets.

Additional Information

The name bergamot arose because the scent is similar to that of oranges grown around Bergamo, Italy.

Bigroot Pricklypear (beavertail, plains or common pricklypear)
Opuntia macrorhiza
 Cactus family: Cactaceae

Flowering Period
 Late May into June.



Description

Perennial. Height: 10 inches. Stems are jointed segments (pads), nearly round, with clusters of 1 to 6 spines mostly near the margin. Leaves seldom present. Flowers with many overlapping light yellow petals often reddish at the base. Fruit without spines, red or reddish-purple, fleshy when mature.

Habitat

Dry, sandy, or rocky soil. Full sun.

Propagation

Divide plant at joints in spring. Also by seed. Gather in August and September.

Plains Indian/Settler Uses

Plains Indians ate the fruit both fresh and dried. When food was scarce, the pads were eaten after being boiled so the spines could be easily removed. The thick sap of freshly peeled pricklypear pads was rubbed over painted hides to fix the color. The boys of the Dakota nation used the pads as a target in the "cactus game." Settlers used the fruits to make wine and preserves.

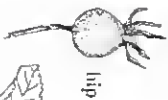
Additional Information

If you look closely, each spine is surrounded by small barbed prickles, called glochids. These, too, are sharp and can be very painful. The fruits may have glochids even if they have no spines.

Prairie Wild Rose (Arkansas rose)

Rosa arkansana

Rose family: Rosaceae



Flowering Period

Late May into July.

Description

Woody shrub. Height: up to 20 inches. Stems reddish-brown with lower portion densely covered with yellow spines. Leaves odd-pinnately compound with 7 to 11 oval, toothed leaflets. Flowers of five pink petals are borne in clusters of two or three. The fruit (hip) is bright red.

Habitat

Dry to moderately moist soil. Full to partial sun.

Propagation

Grow by root division in late fall or early spring, or by seed. Gather hips for seed in October. Keep seeds moist, stratification needed.



Plains Indian/Settler Uses

The fruits were eaten by Plains Indians when food was scarce. Both settlers and Plains Indians brewed the hips for tea. Since rose hips are high in vitamin C, this tea helped people stay healthy over the winter. The inner bark of the rose was sometimes used for smoking. Several preparations from this plant were used medicinally. Settlers dried the petals and added them to black tea.

Additional Information

There are several native species of wild rose in the Great Plains, but this is the most common.

Butterfly Milkweed (pleurisy-root, orange swallow-wort)

Asclepias tuberosa

Milkweed family: Asclepiadaceae

Flowering Period

June and July, into September.

Description

Perennial with deep taproot, spreading by rhizomes. Height: 1-2.5 ft.. Hairy stem. Leaves oblong and narrow. Typical milkweed flowers in flat-topped clusters at the top of stems. Color ranges from deep red-orange to yellow. Spindle-shaped seed pod.

Habitat

Well drained soil. Dry open prairie. Full to partial sun.

Propagation

Easiest by seed. Gather in September and October. 60 days stratification is helpful. Transplanting mature plants difficult due to deep tap root.



Plains Indian/Settler Uses

Both groups used the root in various ways for a wide range of medical problems. These included diseases of the lungs, which explains its name 'pleurisy root.'

Additional Information

This beautiful and long lasting flower attracts many species of butterflies and other insects. It is unusual among the milkweeds because it does not have a milky, latex sap.

Common Milkweed (Silkweed, silky swallow-wort)
Asclepias syriaca

Milkweed family: Asclepiadaceae

Flowering Period

June through August.

Description

Perennial with a deep rhizome. Height: 2 1/2-4 feet. Stout, softly hairy stems, often not branched, with milky, latex sap. Leaves oblong, and mostly opposite. Flowers are pale to dark pinkish rose, shaped like an hourglass, and borne in rounded clusters at the top of stems and in leaf axils. Seed pod a broad spindle shape. Pods open when dry to release tufted seeds.

Habitat

Dry to moist soil. Often in disturbed sites. Full sun.

Propagation

By seed. Gather in late summer or fall. Seed must not dry out.

Plains Indian/Settler Uses

Plains Indians used this species as food at three stages: young shoots or firm green buds were added to soup, and the flower clusters were boiled to make syrup.

Additional Information

Not all milkweeds are edible and even edible species must be cooked correctly to be safe. They must not be eaten raw since they contain chemicals that are toxic to people and many animals. Monarch butterflies use this fact to their advantage since the caterpillars retain the toxic properties of their food source and are thus avoided by many predators. This species is weedy and often not considered to be desirable despite its culinary and ornamental uses.



Hemp Dogbane (Indian-hemp, prairie dogbane, hemp-plant)

Apocynum cannabinum

Dogbane family: Apocynaceae

Flowering Period

Late May into July.

Description

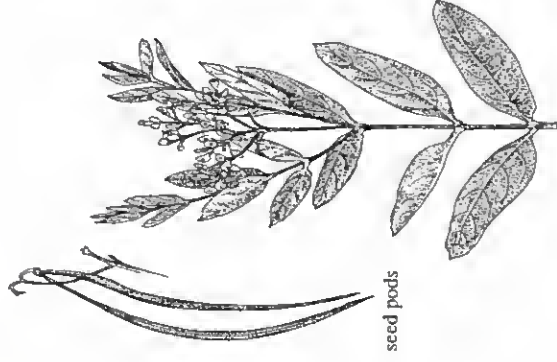
Perennial with deep branching taproot. Height: 3-4 feet. Leaves opposite, oblong. Small white flowers in clusters at the tip of stems. Long, slender seed pods open to release tufted seeds into the wind.

Habitat

Moist soils. Full sun.

Propagation

By seed. Gather in September. Stratification needed. Seeds must not dry out.



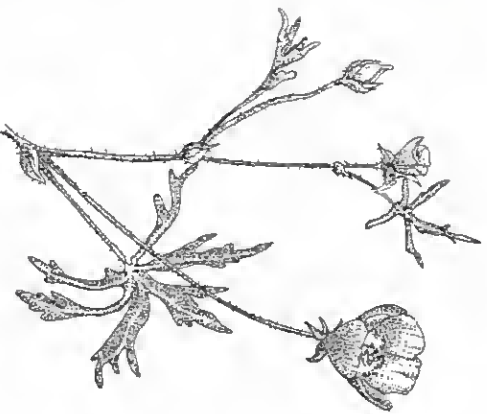
Plains Indian/Settler Uses

Plains Indians used the dried stem fibers to make rope and fish nets. The stems were not gathered until thoroughly dry. The fibers were removed and made into rope during the winter.

Additional Information

The sap is a toxic, milky latex. Although often considered a weed, dogbane makes an attractive yard plant.

Purple Poppymallow (wine-cup, buffalo-poppy, cowboy-rose)
Callirhoe involucrata
 Mallow family: Malvaceae



Flowering Period
 Late May, peaking in June, but continuing throughout summer.

Description
 Perennial growing from a large, carrot-shaped taproot. Height: stems sprawl over the ground. Leaves are nearly round but deeply divided. Flowers are vibrant rose to purple with five overlapping petals.

Habitat
 Moderately dry to moist, often sandy soils. Full sun to partial shade.

Propagation
 By seed. Gather in late summer. Can be transplanted in spring.

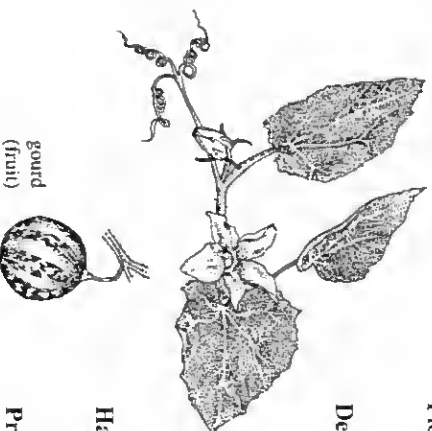
Plains Indian/Settler Uses

The Teton Dakota treated head colds with smoke from the dried, burning roots. Both Plains Indians and settlers boiled the root as a vegetable.

Additional Information

Purple poppymallow makes an attractive garden plant, blooming over a long period. The petals make a colorful addition to salads. A related species, *C. alcaeoides*, is similar except that the flowers are light pink.

Buffalo-gourd (wild-gourd)
Cucurbita foetidissima
 Cucumber family: Cucurbitaceae



Flowering Period
 June to August.

Description
 Perennial. Stems rough and trailing. Leaves coarse and thick, triangular, lobed, grayish green, ill smelling when bruised. Flowers are solitary, large, and yellow. Fruits are rounded, smooth, and greenish striped, sometimes with orange or yellow.

Habitat
 Sandy and gravelly soils. Full sun.

Propagation
 From seed. Gather in fall after the gourds have ripened and dried.

Plains Indian/Settler Uses

The root of this plant was highly prized by the Plains Indians for its medicinal uses. It is a plant that was thought to have mystic properties, and many feared to dig the root themselves. The dried gourds were used as rattles, but the thicker-walled gourds grown in the southwest were preferred and often obtained by trading.

Additional Information

There is evidence that Plains Indians cultivated a variety of edible squashes and pumpkins before the settlers arrived. They were not native to this area and must have been brought in from the southwest.

Perennials

Shell-leaf Penstemon (*Penstemon grandiflorus*). This large showy plant has blue-green stiff waxy-appearing leaves with smooth edges set along a stout unbranched stem. The large lavender to bluish snapdragon-like flowers form in May and early June. It will reach 2 to 3 feet in height. Full sun. Medium to low water usage.



Purple Prairie Clover (*Dalea purpurea*). This 1- to 2-foot sized plant of the eastern tallgrass prairie forms clumps of stiff stems covered with finely divided leaves that have a strongly aromatic scent. In late June the gray thimble-like flower heads form at the ends of each stem, then burst into bright pinkish-red flowers in July, attracting butterflies. Very drought tolerant. Likes sun.

Purple Prairie Coneflower (*Echinacea purpurea*).

This eastern cousin of our native narrow-leaved purple coneflower looks something like a large deep pink daisy. The compound flower has about 10 daisy-like pink ray flowers with a dark brown eye or cone in the center and makes a good cut flower. It thrives under ordinary garden conditions and reaches about 3 feet in height. Long blooming season. Low water. Likes sun but tolerates some light shade.



Echinacea angustifolia



Dotted Gayfeather (*Liatris punctata*). This plant is typical of the drier sites in the tallgrass prairie. The plant has a clump type habit of growth with several wiry stems covered with narrow stiff leaves sprouting from a thick taproot. In late summer the bright pink to lavender blossoms start at the top of each stem then spread downward, forming a

bottlebrush-like bloom. The plant reaches a maximum height of 2 feet and appreciates hot, dry, sunny locations. Attracts butterflies and hummingbirds.

Grayhead Prairie Coneflower (*Ratibida pinnata*).

This plant looks something like a tall, thin and pale black-eyed Susan. It forms a narrow clump with many thick stems and large compound leaves. The lovely yellow petal flowers often droop and flutter in the wind, and the central brown cone flowers have a grayish green appearance prior to blooming. The average height is about 4 feet. Drought tolerant. Likes sun but tolerates light shade. Blooms June-August. Easy to grow. Indispensable to a native garden.



Black-eyed Susan (*Rudbeckia hirta*). Black-eyed Susans are vigorous biennial or perennial plants commonly found on disturbed sites. It has thick hairy oval leaves and hairy branching stems. Each of the many side stems is topped with the bright orange-yellow daisy-like black-eyed Susan flower. Blooming starts in early summer and continues until fall. It spreads rapidly from seed. Height 1 to 2 feet. Makes a good cut flower. Likes full sun but tolerates light shade. Medium water usage.

Ohio Spiderwort (*Tradescantia ohioensis*). Spiderworts, members of the lily family, have smooth stems and long narrow leaves. The bluish violet or pink three-petaled flowers last only a day. The plant's thick, sticky sap, when drawn out, looks something like a strand of spider web material. Ohio spiderworts are a tall upright variety reaching a height of about 2 feet. Prefers sun but tolerates light shade. Medium water usage.



Spiderwort

Long-Bracted Spiderwort (*Tradescantia bracteata*). This Nebraska prairie plant, common throughout the state, also has smooth stems and leaves and bluish violet or pink flowers. It is identified by its long leaf-like bracts found just below the flower clusters at the top of the stems. It likes road ditches and the bottom of railroad embankments. It reaches a height of about 16". Blooms from late May into July. Prefers full sun but tolerates light shade. Medium water usage.

Shrubs

Purple Poppy Mallow (*Callirhoe involucrata*). Sometimes called wine cup, this low growing, sprawling plant has lobed leaves and intense reddish purple flowers. The flowers look like small hollyhocks with five large petals and a central style. The stems of the plant arise from a deep carrot-like root and weave their way horizontally between the grasses and other plants. They bloom in late May and June. Grows to about 1 foot tall. Likes sun. Low water usage.



American Hazelnut (*Corylus americana*). This small attractive shrub was once so numerous underneath the larger trees in the riparian forests that families would bring back basketfuls of nuts. Now few of these plants can be found there. Some have been found in Wilderness Park along Salt Creek. Hazelnut produces large rough dark green leaves with a double set of teeth. In good sun the leaves turn a variety of colors in the fall including gold, orange, and apricot. Height is 4 to 10 feet. These shrubs require little care and prefer being an understory plant. Plant 2 for better yield.



Grasses

Pitcher's Sage (*Salvia azurea*). Pitcher's Sage is not really a sage but a salvia. It is a common part of prairie meadows in southeastern Nebraska, in dry or moist locations. Its one or more stems are erect, branch near the top and are square in cross section. In August the sky blue or medium blue tubular flowers appear in whorls at the top of each stem. Attracts butterflies and hummingbirds. Height from 2 to 5 feet. Likes sun. Low water usage.



Prairie Blue Sage

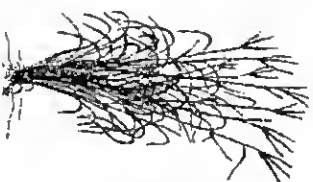
Plains Yellow Primrose (*Calyptophus serrulatus*). This small evening primrose, sometimes called the tooth-leaved evening primrose, produces bright yellow flowers that look like lemon drops from a distance. This wiry, drought tolerant plant has a deep taproot, thin woody branching stems and small lanceolate, toothed leaves. From 1 to 2 feet tall, the plant flowers from May through July. Very pretty plant. Likes sun. Low water usage.

Woodland Phlox (*Phlox divaricata*). Woodland or blue phlox is found in the shady, moist woodland portions of Wilderness Park. Its slender unbranched stems arise from the basal leaves and stems at ground level and are topped with clusters of tubular, five-petaled, light-blue flowers. The plant blooms in late April and May and reaches a height of 18".



Prairie Phlox

Big Bluestem Grass (*Andropogon gerardii*). In summer Big Bluestem plants produce a 3- or 4-foot fountain of medium green leaves (often with reddish tips) in a 1-foot in diameter clump. In late summer the seed bearing stems or culms form and shoot upward from the clump from 5 to 7 feet. The leaves and stems begin turning a characteristic wine-red color in early September. Makes beautiful winter texture for your garden. Low water. Full sun.



Prairie Dropseed Grass (*Sporobolus heterolepis*). Prairie Dropseed, when grown by itself, has an attractive airy, fuzzy appearance because of its many very narrow leaves. The seed bearing stems that form in late summer are also fine and give the plant an almost smoky appearance. It reaches a maximum height of about 3 feet and has a yellow color in the fall.

Sideoats Grama Grass (*Bouteloua Curtipendula*). Sideoats reaches a maximum height of about 2 feet. The leaves have a blue-green color and the plant tends to form a sod rather than a bunch or clump as with Little Blue Stem. Its major feature is the narrow flower or seed stalks, which form in the middle of summer. When mature, each unbranched seed stalk bears a single row of short seed spikes hanging evenly spaced along the side of the stalk.

